

REMARKS

Claims 1-12, 14-17, 19, 22, 26, 28, 29, 39, 40 and 41 are now pending in the application. Claims 13, 18, 20, 21, 23-25, 27, and 30-38 were cancelled without prejudice. Claims 40 and 41 are new and fully supported by the specification as originally filed. No new matter was added. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-4, 6, 13-15, 17-20, 23, 25, 26-30, 32-37, and 39 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Persson (WO 91/07931). This rejection is respectfully traversed.

Claims 13, 18, 20, 21, 23-25, 27 and 30-38 were cancelled without prejudice and will not be discussed further.

Persson discloses an ankle prosthesis that includes a plate 1 implanted in the tibia and sleeves 2 implanted in the talus. The prosthesis includes a ball 19 that is slidably connected to the sleeves 2 by means of a body 18, and a socket 10 slidably connected to the plate by a dovetail connection (grooves 6). As such, the device of Persson includes only one joint, i.e., an articulating surface between the ball 19 and the socket 10. There is no separate bearing that can articulate with both the tibial component and the talar component. Component 10 (socket), which the Examiner characterized as a "bearing" with a convex surface articulating with a concave surface 9 of the tibial dome 7, is not a separate bearing component and does not articulate with

the tibial component. The convex surface 9 of component 10 is in fact glued to the concave surface of the tibial dome 7:

The plate has a depression 9, in which the ankle joint socket 10 is fixed, e.g. by adhesive.

See page 3, lines 1-3. Accordingly, Persson fails to disclose a bearing that articulates with the talar component and also rotates relative to the tibial component. In fact, Persson teaches away from such a bearing by specifying fixing the socket 10 to the depression 9 by adhesive. This eliminates one of the two articulation/joint surfaces required for a separate bearing between a tibial and talar component.

Accordingly, and regarding independent claim 1, Persson fails to disclose, among other elements, a bearing matingly articulating with the talar component, the bearing having a bearing dome mating with the tibial dome for relative rotation therebetween. Further, Persson fails to disclose a single tibial flange and a single bearing flange engaging the tibial flange to limit rotation of the bearing relative to the tibial component. Therefore, claim 1 is not anticipated by or obvious in view of Persson.

Similarly, and regarding independent claim 26, Persson fails to disclose a method that includes, among other elements, articulating a bearing for rotation relative to the tibial component and hinged movement relative to the talar component. Further, Persson fails to disclose only one tibial flange and only one bearing flange and limiting relative rotation between the tibial component and the bearing by engaging the tibial and bearing flanges. Therefore, claim 26 is not anticipated by or obvious in view of Persson.

Claims 2-4 and 6 ultimately depend from claim 1 and, at least for this reason, are not anticipated by Persson. Claims 28 and 29 depend from claim 26 and, at least for this reason, are not anticipated by Persson.

Claims 14, 15, 17, and 19 were amended to depend from allowable claim 22 and are, therefore, allowable.

Claim 39 was amended to depend from new claim 40, which is not anticipated by Persson because it also recited a bearing articulating with the tibial and talar components as discussed below.

Claims 1-4, 6, 13-19, and 23-39 stand rejected under 35 U.S.C. § 102(e) as being anticipated Deffenbaugh et al (U.S. Pat. No. 7,011,687). This rejection is respectfully traversed.

Applicant's respectfully submit that Deffenbaugh et al is not a prior art reference under 35 U.S.C. § 102(e). Applicants have conceived and reduced to practice the invention in the United States prior to the filing date January 6, 2003 of Deffenbaugh et al. A Declaration under 37 CFR §1.131 signed by all the inventors is attached. Redacted photocopies of an invention disclosure and drawings demonstrating conception and reduction to practice in the United States prior to January 6, 2003 are attached at tabs A and B. Each of the dates deleted or otherwise blacked out from the attached exhibits are prior to January 6, 2003. Therefore, Deffenbaugh et al is not a prior art reference under §102(e).

Applicants further submit that Deffenbaugh et al fails to disclose all the elements of the rejected claims, as discussed below.

Claims 13, 18, 20, 21, 23-25, 27 and 30-38 were cancelled without prejudice and will not be discussed further.

Deffenbaugh et al discloses an ankle prosthesis having a tibial component 38, a bearing component 36 and a talar component 34. The bearing component 36 slidably fits and snap-locks with a latch 106 into an opening 64 of the tibial component, such that medial and lateral ribs 118, 124 of the bearing component 36 slide into corresponding slots 74, 86 of the tibial component 38. See FIG. 4, and column 4, lines 50-58, column 5, lines 50-53, and column 4, lines 11-49. Therefore, the bearing component 36 articulates only with the talar component and not with the tibial component.

Accordingly, and regarding independent claim 1, Deffenbaugh et al fails to disclose, among other elements, a bearing matingly articulating with the talar component, the bearing having a bearing dome mating with the tibial dome for relative rotation therebetween. Further, Deffenbaugh et al fails to disclose a single tibial flange and a single bearing flange engaging the tibial flange to limit rotation of the bearing relative to the tibial component. Therefore, claim 1 is not anticipated by or obvious in view of Deffenbaugh et al.

Similarly, and regarding independent claim 26, Deffenbaugh et al fails to disclose, among other elements, articulating a bearing for rotation relative to the tibial component and hinged movement relative to the talar component. Further, Deffenbaugh et al fails to disclose only one tibial flange and only one bearing flange and limiting relative rotation between the tibial component and the bearing by engaging the tibial and bearing flanges. Therefore, claim 26 is not anticipated by or obvious in view of Deffenbaugh et al.

Claims 2-4 and 6 ultimately depend from claim 1 and, at least for this reason, are not anticipated by Deffenbaugh et al. Claims 28 and 29 depend from claim 26 and, at least for this reason, are not anticipated by Deffenbaugh et al.

Claims 14-17 and 19 were amended to ultimately depend from allowable claim 22 and are, therefore, allowable.

Claim 39 was amended to depend from new claim 40, which is not anticipated by Deffenbaugh et al, because claim 40 also recites, among other elements not disclosed by Deffenbaugh et al, a bearing articulating with the tibial and talar components as discussed below.

Accordingly, reconsideration and withdrawal of these rejections is respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 7-8 and 10-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Deffenbaugh et al. This rejection is respectfully traversed.

Applicant's respectfully submit that Deffenbaugh et al is not a prior art reference under 35 U.S.C. § 103(a) as discussed above. Additionally, Deffenbaugh et al fails to disclose all the elements of claims 7-8 and 10-12 as discussed below.

As discussed above and regarding independent claim 7, Deffenbaugh et al fails to disclose a bearing having a bearing dome, the bearing dome having a convex surface mating with the concave surface of the tibial dome for relative rotation therebetween. The bearing component 36 of Deffenbaugh et al does not rotate relative to the tibial component 38. The shape of the tibial and bearing domes facilitates

articulation and relative rotation therebetween. Further, Deffenbaugh et al fails to disclose a single tibial flange and a single bearing flange, wherein the bearing flange interacts with the tibial flange to limit rotation of the bearing relative to the tibial component. Therefore, claim 7 is patentable over Deffenbaugh et al. Claims 8 and 10-12 depend from claim 7 and, at least for this reason, are also patentable over Deffenbaugh et al.

Claims 5, 9, 20, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Deffenbaugh et al in view of Tullos et al (U.S. Pat. No. 5,658,338). This rejection is respectfully traversed.

As discussed above, Applicants respectfully submit that Deffenbaugh et al is not prior art under 35 U.S.C. § 103(a). Additionally, Deffenbaugh et al in view of Tullos et al fails to disclose all the elements of the rejected claims.

Claim 5 depends from claim 1, which, as discussed above, is not anticipated or obvious over Deffenbaugh et al. Claim 9 depends from claim 7, which, as discussed above, is not anticipated or obvious over Deffenbaugh et al. Tullos et al is combined with Deffenbaugh et al in the Office Action to provide the ridge elements and does not add any of the missing elements identified above in connection with independent claims 1 and 7. Therefore claims 7 and 9 are patentable over Deffenbaugh et al in view of Tullos et al.

Claims 20 and 21 were cancelled without prejudice.

Further, Applicants do not acquiesce to the reasons provided by the Examiner to the effect that Deffenbaugh et al is combinable with Tullos et al. Tullos et al discloses a

pre-formed modular cement mantle with ribs for securing an acetabular implant to the acetabulum using cement. The tibial component is secured to the bone with a tibial fin 58 and can be implanted without the use of bone cement. See FIG. 1.

Reconsideration and withdrawal of these rejections is respectfully requested.

ALLOWABLE SUBJECT MATTER

The Examiner states that claim 22 would be allowable if rewritten in independent form. Accordingly, Applicants have amended claim 22 to include the limitations of the base claim and any intervening claims. Therefore, claim 22 is now in condition for allowance.

NEW CLAIMS


Claim 40 is new and fully supported by the specification and drawings as originally filed. Support can be found, for example, in FIGS. 6-9 and paragraph [0024]. Each of Persson and Deffenbaugh et al fails to disclose, either singly or in combination, among other elements, a bearing having a dome including a convex articulating surface mating with the concave articulating surface of the inner pocket for relative rotation therebetween. Claim 41 is new and fully supported by the specification and drawings as originally filed. Support can be found, for example, in FIG. 2. Claim 41 depends from claim 1, which was discussed above. Therefore, claims 40 and 41 are in condition for allowance.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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